

Competitive orientations and motives of adult sport and exercise participants

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Abstract:

Participants in four different adult sport and exercise programs (running club, exercise classes, cardiac rehabilitation program, senior games) completed measures of competitive orientation and participation motivation. Our samples were older and more diverse than samples of previous research, and their competitive orientations and motives were similarly diverse. Multivariate analyses revealed gender and sample differences. Males were higher than females on competitiveness and win orientation, and runners were less win-oriented than other groups, but overall, all groups were similar to previous college-age samples in competitive orientation. Groups varied on specific motives, with females rating fitness, flexibility, affiliation, and appearance higher than males did. Generally, participants were diverse in orientations and motives, and positive about their participation. Research and conceptual models of sport orientation must extend beyond achievement motives to capture the diversity of adult participants. Program directors and instructors who offer activities and approaches to match this diversity will encourage wider participation and provide a more satisfying experience for more participants.

Article:

Achievement orientation and participation motivation are popular research areas in sport and exercise psychology, with considerable theoretical and empirical work in the existing literature. Several sport psychology scholars (e.g., Duda, 1992; Gill, 1993; Roberts, 1992) have drawn upon the theoretical work on achievement motivation (e.g., Nicholls, 1984; Dweck, 1986; Spence & Helmreich, 1983) and applied those models to sport and exercise motivation. Considerable empirical work also exists on specific sport participation motives (Gill, Gross, & Huddleston, 1983; Gould, Feltz, & Weiss, 1985).

Weiss and Chaumeton's (1992) comprehensive review of these literatures reveals consistent findings. Overall, the sport psychology literature supports the large body of psychological research on achievement, and suggests that a mastery or task orientation and an emphasis on intrinsic motivation, as opposed to a win orientation and emphasis on extrinsic rewards, encourages participation and achievement. Empirical work on participation motivation indicates that sport participants predominantly seek to learn skills, to be physically active, and especially to have fun and enjoy activity. Goals such as winning awards and gaining recognition are cited much less often.

Despite the relatively consistent and seemingly widely generalizable findings, the samples are limited. Research on motives of sport participants focuses on achievement orientation in competitive sports, and largely involves children and young adults. The competitive orientation research focuses on intercollegiate athletes, and participation motivation research focuses on youth sports. Neither line of research has extended to adults beyond college age, who often participate in noncompetitive sport and exercise programs.

The existing theoretical models and empirical findings may not apply to older and more diverse populations as they do to younger participants. Thus, consideration of competitive orientations and motives with nontraditional adult sport and exercise participants has implications for assessing the generalizability of our conceptual models and current knowledge base.

Moreover, consideration of adults' sport and exercise motivation has important practical implications. Many sport and exercise programs designed for older adults emphasize continual physical activity and lifetime participation. Participants in these programs may share motives with younger athletes, but they may just as well emphasize health outcomes or social experiences and be less concerned with both mastery and win-oriented goals. Matching programs to participants' goals and interests is a key to encouraging participation. Information on competitive orientation and specific participation motives may help program directors and instructors meet the needs and interests of participants.

The current study is an exploratory investigation of competitive orientation and participation motives with several nontraditional sport and exercise programs. The four sample groups (running club, community exercise classes, cardiac rehabilitation program, senior games) do not constitute a representative sample of adult sport and exercise programs. Rather, they are four selected, diverse programs that may provide initial information on the scope of motives and help determine if the conceptual models and empirical information from the existing research can be extended to a wider range of sport participants.

With our samples, we used existing measures of competitive orientation and participation motivation for comparison purposes. First, we used the Sport Orientation Questionnaire (SOQ, Gill & Deeter, 1988) to assess competitive orientation. The SOQ has been widely used with competitive sport participants, and Gill and colleagues (Gill, 1993; Gill & Deeter, 1988; Gill & Dzewaltowski, 1988) provided good evidence for its reliability and validity. The SOQ has been used with both athletes and nonathletes, but not with groups similar to our samples. Moreover, the SOQ is a multidimensional, sport-specific measure with three subscales: competitiveness (enjoyment of and desire to strive for success in competition), win orientation (focus on interpersonal comparison and winning), and goal orientation (focus on personal performance standards), developed within a multidimensional model of achievement orientation. Thus, we can assess overall competitive orientation, and also compare, the emphasis on winning and personal standards of our samples to previous research samples.

Participation motivation measures typically consist of lists of reasons that lack the psychometric strengths of achievement orientation measures. However, they do permit a wider range of options rather than restricting respondents to predetermined achievement motives. Duda and Tappe (1988, 1989) developed a participation motivation measure that retains the wide range of options from earlier measures (e.g., Gill et al., 1983), and places those motives within a conceptual framework. Also, Duda and Tappe's measure is designed to assess motives for participation in exercise activities, and thus, includes a wide range of motives likely to apply to our sample groups.

Because this study is exploratory, we did not test specific hypotheses. Previous research indicates that competitive athletes are higher than nonathletes on all SOQ scores, and we expected our samples to have competitive orientation scores similar to, or lower than, nonathletes in previous college-age samples. Also, previous research consistently reveals gender differences with males higher than females on competitiveness and win orientation, but not on goal orientation. We expected similar gender differences in our samples. Previous research on participation motivation, including Duda and Tappe's limited work, does not provide any consistent results to permit predictions. For example, we cannot predict that participants in our study will be high or low on affiliation or competition motives, and we do not have a standard to indicate if a particular score is high or low. We do expect that some motives will be more important than others, and that the four groups will differ. For example, running club members may cite competition motives more often, whereas cardiac rehabilitation participants likely emphasize health motives. However, we do not offer any specific hypotheses. Our major purpose is to describe the competitive orientations and motives of our samples. Also, we will examine gender differences and differences among sample groups.

Method

Participants

The overall sample included four separate sample groups selected to reflect diverse activities and participants. Specifically, we sampled participants at a running club ($n = 43$), at two exercise classes at a private fitness club ($n = 35$) and at a cardiac rehabilitation exercise program ($n = 44$) during the first phase of the project. Later, we surveyed participants in one local Senior Games program ($n = 87$).

Measures

All participants in all four samples completed the Sport Orientation Questionnaire (SOQ, Gill & Deeter, 1988). As noted earlier, the SOQ has established reliability and validity, and yields three scores: competitiveness, win orientation, and goal orientation. The SOQ has been used in several studies of college-age athletes and nonathletes and scores are available (Gill, 1993) for comparison, although no published results are available for older samples.

We used Duda and Tappe's (1989) Personal Incentives for Exercise Questionnaire (PIEQ) to assess participation motives. Duda and Tappe developed the initial 85-item version based on a literature review and open-ended responses of adult exercisers. That version was administered to a large undergraduate sample, and factor analyses yielded 9 factors: Appearance (e.g., I exercise because I want a nice body), Competition (e.g., I find competitive physical activities fun), Mental Benefits (e.g., I exercise to control my anxiety), Affiliation (e.g., I try to exercise with others whenever I can), Mastery (e.g., When exercising, I like to do as well as I can), Flexibility/Agility (e.g., I exercise to increase my agility), Social Recognition (e.g., I exercise to gain the attention of other people), Health Benefits (e.g., I exercise to avoid illness), and Weight Management (e.g., Physical activity helps me to lose weight). Subsequent testing supported a tenth factor, Fitness (strength/endurance) and we used the resulting 48-item version with the three samples in the first phase. Senior Games participants did not complete the full PIEQ because we wanted a simple measure that would be short and easy to complete as a follow-up survey. We selected one item to represent each factor for a 10-item motives survey.

Procedures

Program administrators were contacted in advance and we arranged to administer measures in person to the three groups in the first phase. Research assistants explained the study and administered questionnaires at a running club meeting, at two exercise classes at the fitness club, and at a cardiac rehabilitation program exercise session. Although participation was voluntary, participation rates were high. All those contacted at the running club and exercise classes completed questionnaires. At the cardiac rehabilitation program tight time schedules and prescribed programs prohibited completion of the measures on site. Participants took questionnaires home to be completed and returned at a subsequent session. Despite typical irregular attendance at the program, vacation schedules, and general problems associated with measures that are taken home, participants were cooperative and over half completed and returned surveys.

Procedures differed for the Senior Games sample. We distributed survey packets with the SOQ, along with a stamped, addressed envelope, to 150 participants at the pre-games meeting (137 actually participated in the games). A total of 87 surveys were completed and returned prior to the games. A few months after the Games we mailed a follow-up survey including the 10-item motives measure, to those who had returned the initial survey, and 73 participants returned the completed follow-up survey.

Results

Our primary results are profiles of the participants, including descriptive information on demographic characteristics, SOQ competitive orientation scores and scores on the PIEQ or the 10-item motives measure. In addition to the descriptive information, we conducted multivariate analyses comparing SOQ and PIEQ scores across gender and sample groups for the three groups in the first phase. We used 1-way MANOVAs to compare male and female Senior Games participants.

Demographic Information

Descriptive information for all four samples is presented in Table 1. Overall, the samples were predominantly white, married, employed, highly educated, and included slightly more males than females. The running club included some younger students; the exercise classes had more single than married people and was equally divided between men and women; and most Senior Games participants were retired. Participants in all groups represented a wide age range. As expected, Senior Games participants, who start at age 55, and cardiac rehabilitation program participants were older. The exercise classes and running club members were mainly young to middle-age adults, but included participants of all ages.

Responses to the questions asking how long and how often they participated in their activity elicited a wide range of responses. Cardiac rehabilitation participants were more homogenous, with most participating 0-2 years, and all participating 3 times per week. The other three groups were more varied, but overall, they were committed, regular participants who had been in their activity for several years.

Competitive Orientation and Motives

The competitive orientation scores from the SOQ and the 10 motive scores (PIEQ for the running, exercise class and rehabilitation samples; 1-item scores for seniors) for each sample are presented in Table 2. Generally, the competitive orientation scores for these samples are similar to those of younger samples in previous research. For example, SOQ scores for our four samples were slightly higher than the college nonathlete scores (Comp. = 45.9; Win = 18.6; Goal = 25.2), but not as high as the scores of intercollegiate athletes (Comp. = 58.1; Win = 22.9; Goal = 27.0) reported by Gill (1993). Seniors, who were participating in a competitive event, had the highest competitiveness scores. Given that previous research indicates that competitiveness is the score that most differentiates athletes and nonathletes, seniors' higher scores are logical.

No norms are available for the PIEQ, and the limited information provided by Duda and Tappe did not include scores that might be used for comparison. The 1-item ratings of the Senior Games participants are not directly comparable to the total scores of the other samples, but multiplying the 1-item score by the number of items in the relevant PIEQ score gives an approximation of how seniors compared to the other groups.

Gender and Sample Comparisons

A Gender x Sample (2 x 3) MANOVA was used to examine the three SOQ scores and a similar MANOVA was used with the 10 PIEQ scores of the three sample groups in the first phase of the study. Because the senior games data were collected over a year later with different procedures, they were analyzed separately. The Gender x Sample MANOVA on the three SOQ scores revealed gender, $F(3,99) = 6.73, p < .001$, and sample, $F(6,198) = 3.82, p < .001$, main effects and no interaction. The MANOVA on the PIEQ scores also revealed Gender, $F(10,85) = 3.77, p < .001$, and Sample, $F(20,170) = 3.09, p < .001$, main effects.

Sample Comparisons. Runners were lower than the other two groups on win orientation and slightly higher on competitiveness. Although they were not part of the MANOVA, it is notable that seniors, who participated in a competitive event, had the highest competitiveness scores. As Table 2 suggests, few sample differences were evident for PIEQ scores. Runners were highest and the rehabilitation group lowest on mental benefits and competition. For appearance, the exercise classes were highest and the rehabilitation group lowest. Although the seniors scores are not directly comparable, the seniors seem to be higher than the other groups on competition, mastery, affiliation and social recognition, and lower on appearance and weight motives.

Gender Comparisons. A 1-way MANOVA on the three SOQ scores for the seniors revealed a Gender effect, $F(3,77) = 5.10, p < .001$, similar to the gender effect with the other samples. As Table 3 indicates, in all samples, males were higher than females on competitiveness and win orientation, and no differences were evident for goal orientation.

The 1-way MANOVA on the 10 motive scores for the seniors yielded a nonsignificant gender effect, $F(10,55) = 1.27$, n.s. However, univariate gender differences were significant for several items, with females higher than males on fitness, weight, flexibility and health motives. Gender differences were in the same direction on all

those PIEQ scores for the other three samples, and for those samples females were significantly higher than males on PIEQ appearance.

Discussion

Our results provide some information on the competitive orientations and motives of older adults sport participants to extend previous work with college athletes and younger participants. The current study included four separate samples from a running club, exercise classes, a cardiac rehabilitation program and Senior Games. The overall sample was predominantly white, well-educated and middle class, but quite diverse in age and activities.

The overall competitive orientation scores, and the observed gender and sample differences are logical in relation to the existing research with younger samples. Runners' lower scores on win orientation are in line with previous research summarized by Gill (1993). Previous studies comparing athletes across different sports indicated that athletes in more individual sports (e.g., cross country) were less win oriented than other athletes even though they were highly competitive and successful. Also, a sample of ultramarathoners who were participating in a selective event were very competitive and goal oriented, but low on win orientation. The runners in the current study, although they were more active and participated in more competitive events than the other samples, seem to reflect similar competitive orientations with an emphasis on personal standards and performance goals.

Participants in all four samples were similar to, and notably were no lower than, college nonathletes of previous samples. The Senior Games participants were higher on competitiveness than nonathlete college samples, but not as high as college athletes. Athletes in previous samples were intercollegiate athletes in highly competitive programs, and Senior Games participants were not as focused in their competitive efforts. The Senior Games offers many sport and several nonsport opportunities; most seniors participate in several activities; and many win medals for their age and sex categories. Thus, although seniors are competitive, they are not particularly focused on winning, and they do not devote all their efforts to a particular event.

Multifaceted motivation, rather than a focused competitive orientation, was also apparent in the motive results. All samples endorsed multiple motives. With the seniors, keeping in mind that scores range from 1-5, nearly all motives were strongly endorsed. Seniors were high on competition, confirming the SOQ results, and also gave Similar high scores to mastery, affiliation, fitness, flexibility, and health motives. Seniors rated appearance somewhat lower. Also, the cardiac rehabilitation group, the other older sample, had significantly lower PIEQ appearance scores than did the other two groups.

Gender differences on the SOQ were similar to, but not as strong as, gender differences reported in the previous literature (e.g., Gill, 1993). The weaker gender differences were particularly evident for the seniors, although senior males were more competitive and win oriented than senior females. Gender differences on the motives were logical, but again, similarity of females and males was more striking than differences. Females generally endorsed health, affiliation and appearance more than males did, but few differences were very strong. Senior females and males did not differ on competition or appearance motives, but in the younger groups of runners and exercisers, who had higher appearance scores, gender differences were stronger.

Overall, the results indicate that adult sport and exercise participants have multiple motives and more diverse competitive orientations than suggested by the reports on more limited samples in the existing research. Programs that offer diverse activities and alternative approaches are likely to meet the interests and motives, and provide a more satisfying experience, for more diverse participants.

Table 1
Descriptive Information for Sample Groups
Legend for Chart:

A - Run
 B - Ex. Class
 C - Rehab
 D - Seniors

	A	B	C	D
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Gender

Male	27	18	33	53
Female	16	17	11	33

Race/Ethnicity

White	43	31	39	81
Black	--	3	5	1
Asian	--	1	--	--
Native Amer.	--	--	--	--

Marital Status

Married	18	10	38	74
Single	9	21	1	--
Divorced	15	4	--	--
Widowed	--	--	--	10

Education

Grade School	2	--	--	--
High School	10	4	16	28
College	30	30	27	49

Employment

Employed	39	32	18	11
Unemployed	2	--	--	--
Student	4	1	--	--
Homemaker	--	1	4	4
Retired	--	1	18	72

Age

Range	10-59	19-68	47-78	55-99
Mean	36.4	31.4	62.1	68.5

Activity Information

Years in activity

Range	0-25	0-14	0-16	0-77
Mean	7.4	2.9	1.8	28.0
Times/Week or	4.8	3.7	3.0	--

Times/Month	--	--	--	9.6
Miles/Week or	28.7	--	--	--
Minutes/Session	76.6	48.4	--	--

Table 2
Competitive Orientations and Motives for Sample Groups

Legend for Chart:

A - Run
B - Exercise
C - Rehab
D - Seniors

	A	B	C	D
SOQ				
Competitiveness	49.3	45.8	45.0	51.0
Win	18.1	19.7	19.6[a]	19.3
Goal	26.2	26.0	24.6	24.8

Motives (PIEQ/1-Item)

Fitness (7)	28.7	29.7	28.1	4.2
Mastery (4)	16.9	17.1	16.2	4.6
Weight (4)	17.2	16.4	15.7	3.7
Flexibility (6)	21.9	24.3	22.4	4.2
Social Recognition (4)	12.8	12.9	12.1	3.7
Affiliation (4)	14.8	14.7	15.8	4.3
Mental Benefits (7)	27.5	25.5	21.3[a]	4.0
Appearance (5)	20.6	22.0	16.6[a]	3.3
Competition (4)	15.3	13.4	12.6	4.6
Health Benefits (2)	7.9	8.5	8.5	4.1

Note. The number of items in the PIEQ score is given in parentheses. Motive scores for the seniors are from the 1-item ratings. a = Significant univariate sample differences.

Table 3
Competitive Orientations and Motives for M

Legend for Chart:

A - Run/Exercise/Rehab: Males
B - Run/Exercise/Rehab: Females
C - Seniors: Males
D - Seniors: Females

	A	B	C	D
SOQ				
Competitiveness	48.8	42.2[a]	52.9	48.6

Win	20.1	16.0[a]	20.6	17.8[a]
Goal	25.8	25.0	24.5	24.8

Motives (PIEQ/1-Item)

Fitness (7)	27.9	30.0[a]	4.0	4.5[a]
Mastery (4)	16.2	17.2	4.7	4.5
Weight (4)	16.1	17.3	3.4	4.1[a]
Flexibility (6)	21.6	24.6[a]	4.0	4.6[a]
Social Recognition (4)	12.8	12.5	3.6	3.9
Affiliation (4)	14.9	16.1[a]	4.2	4.5
Mental Benefits (7)	24.2	25.9	3.9	4.1
Appearance (5)	18.4	22.0[a]	3.3	3.4
Competition (4)	14.1	13.1	4.6	4.6
Health Benefits (2)	8.2	8.7	3.9	4.4[a]

Note. The number of items in the PIEQ score is given in parentheses. Motive scores for the seniors are from the 1-item ratings. a = Significant univariate gender differences.

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